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BURLINGTON ENVIRONMENTAL

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FACSIMILE COVER SHEET

TO: DAVE CROXTON FAX #: (206) 553-0124

FROM: JOHN STILLER FAX #:

DEPT: REG AFF

TOTAL PAGES 4 INCLUDING THIS COVER SHEET

PHONE #: (206) 223-0500

COMMENTS:

Dave -

Attached are proposed variances for the Per 91 RFI Workplan. They are largely corrections. Please call me on these

Thks John

Burlington Environmental Inc.
2203 Airport Way South • Suite 400 • Seattle, WA 98134
(206) 223-0500 • FAX: (206) 223-7791

PROPOSED VARIANCE FROM USEPA-APPROVED RFI WORK PLAN BURLINGTON ENVIRONMENTAL INC. PIER 91 FACILITY SEATTLE, WASHINGTON

The following list summarizes the proposed modifications to the RFI Work Plan (Burlington, 1992). Burlington is confident that these modifications can be made without substantially affecting the goals of the RFI.

(1) Add the following entry to both the Total Metals (water and soil) and Dissolved Metals (water) sections of Table C-3 of the RFI Work Plan:

Barium	EPA Method 7080/6010	Burlington Laboratory

(2) Add the following entries to Table C-4 of the RFI Work Plan:

EPA Method 7740
Selenium

EPA Method 7760/6010
Silver

(3) Modify the analytical procedure information listed for PCBs on page F-24 in Part F (Quality Assurance Project Plan/Data Management Plan) of the RFI Work Plan to read as follows:

U.S. EPA Method 608/8080; organochlorine pesticides and PCBs by GC/ECD (U.S. EPA 1984, 1987b)

In the existing RFI Work Plan the procedure is mistakenly given as GC/MS.

(4) Replace page 3 of Table F-3 in Part F of the RFI Work Plan with the attached table. The modified table more accurately reflects the goals of the project. The important modifications are as follows:

- Entries for selenium and silver were added to the table. These include method numbers, techniques, and recommended quantitation limits for both soil and water samples.

- Recommended quantitation limits in soil for beryllium, copper, nickel, and zinc, were added to the table.

- The basis for the recommended quantitation limits for metals in soil samples has been changed from the soil digests to the actual soil samples. To reflect this change, the units have been changed from mg/l to mg/kg, footnote c has been revised, and some of the previously given quantitation limits have been revised.

- In the entry for lead, the analysis technique was mistakenly listed as flame atomic absorption. This should have been specified as graphite furnace atomic absorption. The table has been corrected accordingly.

- The reference to toxicity characteristic leaching procedure (TCLP) in footnote e has been removed. No TCLP analyses are proposed in the RFI Work Plan.

REFERENCES

Burlington Environmental Inc. April 1992. RCRA Facility Investigation Work Plan, Burlington Environmental Inc. Pier 91 Facility, Seattle, Washington. Prepared for Burlington Environmental Inc.

Table F-3
RECOMMENDED QUANTITATION LIMITS
(Page 3 of 3)

Analyte	Method	Technique[E]	Quantitation Limits [A,B] Soil (mg/kg)	Water (mg/l)	Analyte	Method	Technique[E]	Quantitation Limits [A,B] Soil (mg/kg)	Water (mg/l)
Arsenic	7060/6010	GFAA	0.5	0.010	Lead	7420/ 7421/ 6010	GFAA/ICP	0.15	0.005
Barium	7080/6010	AA/ICP	10	0.200	Mercury	7470/6010	Cold vapor	0.02	0.002
Beryllium	7090/6010	AA/ICP	0.25	0.005	Nickel	7520/6010	AA/ICP	2.0	0.040
Cadmium	7130/6010	AA/ICP	0.25	0.005	Selenium	7740/6010	GFAA	0.25	0.005
Chromium	7190/6010	AA/ICP	0.5	0.010	Silver	7760/6010	AA/ICP	0.5	0.010
Copper	7210/6010	AA/ICP	1.25	0.025	Zinc	7950/6010	AA/ICP	1.0	0.020

[A] The listed quantitation limits are derived from "Test Methods for Evaluating Solid Waste," SW-846 US EPA (November 1986), from U.S. EPA Contract Laboratory Program (U.S. EPA, 1989), and from Appendix IX of 40 CFR Part 264.

[B] Specific quantitation limits are highly matrix dependent. The quantitation limits listed herein are provided for guidance and may not always be achievable.

[C] Quantitation limits listed for soil/sediment are based on wet weight. The quantitation limits calculated by the laboratory for soil/sediment are calculated on a dry-weight basis as required. Therefore, the actual quantitation limits will be higher based on the percent moisture in each sample. Measured concentrations will be reported on a dry-weight basis.

[D] Compound is not included in the SW-846 list of compounds (Methods 8240 and 8270), and practical quantitation limits (PQLs) are not specified. The recommended quantitation limit shown is an estimate based on previous laboratory reports which included these compounds (SE/E, 1989).

[E] GFAA = Graphite Furnace Atomic Absorption; AA = Atomic Absorption; ICP = Inductively Coupled Plasma.

[F] Attainment of detection limit dependent on state-of-the-art analytical procedures, volume of water collected, and interference effects.